

REMARKS

In view of the above amendments and following remarks, reconsideration and further examination are respectfully requested.

In the Final Rejection mailed September 7, 2005, claims 1-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamamoto et al. in view of Ritland et al. and Smart. This rejection is respectfully traversed, and the relied-upon references are not applicable with regard to the currently presented claims, for reasons to follow.

Smart was relied upon for teaching a laser beam having a square pulse shape, whereby the Examiner concluded that it would have been obvious to use such a laser beam in the process of Yamamoto et al. However, one having ordinary skill in the art would not have been motivated to combine the teachings of Smart with Yamamoto et al.

In this regard, Smart is not concerned with forming a hole in a ceramic green sheet. Rather, Smart discloses a substantially square pulse for processing target material without causing undesirable changes in electrical and/or physical characteristics of material surrounding the target material. To the contrary, the large power utilized by Yamamoto et al. to make a hole in a ceramic green sheet causes changes in physical characteristics of the material to which the laser is applied. The laser pulses of Smart, which have pulse widths on the order of nanoseconds, exhibit power which is much less than that of Yamamoto et al. and cannot be used to make a hole in a ceramic green sheet. Tables A and B associated with Figs. 11a and 11b of Smart show temperatures rising up to 1520K, i.e., 1247°C; however, this temperature is not sufficient for hole formation in a ceramic green sheet. Thus, the teachings of Smart cannot be applied to making a hole in a ceramic green sheet.

In view of the above differences between Yamamoto et al. and Smart, one having ordinary skill in the art would not have looked to Smart for guidance as to how the hole-forming method of Yamamoto et al. could be modified. Thus, a prima facie case of obviousness has not been established for claim 1, whereby claims 1-14 are allowable.

Irrespective of the above, claim 1 has been amended to better emphasize a main feature of the invention and further distinguish this claim from the relied-upon references. In this regard,

claim 1 has been amended to recite that the ceramic green sheet is **capable of being baked at a temperature lower than 1000°C**, and that the hole is formed **such that a protruding portion is not present in the ceramic green sheet around the hole**. As explained on pages 2-3 of the original specification with reference to Figure 8, elimination of a protruding portion (melting substance 17) is an object of the instant invention.

These additional limitations are not taught or suggested by Yamamoto et al., Smart or Ritland et al., and accordingly, a prima facie case of obviousness of claim 1 cannot be established relying on these references. Thus, claims 1-14 are allowable.

In view of the above amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and an early Notice of Allowance is earnestly solicited.

If after reviewing this Amendment, the Examiner believes that any issues remain which must be resolved before the application can be passed to issue, the Examiner is invited to contact the Applicants' undersigned representative by telephone to resolve such issues.

Respectfully submitted,

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